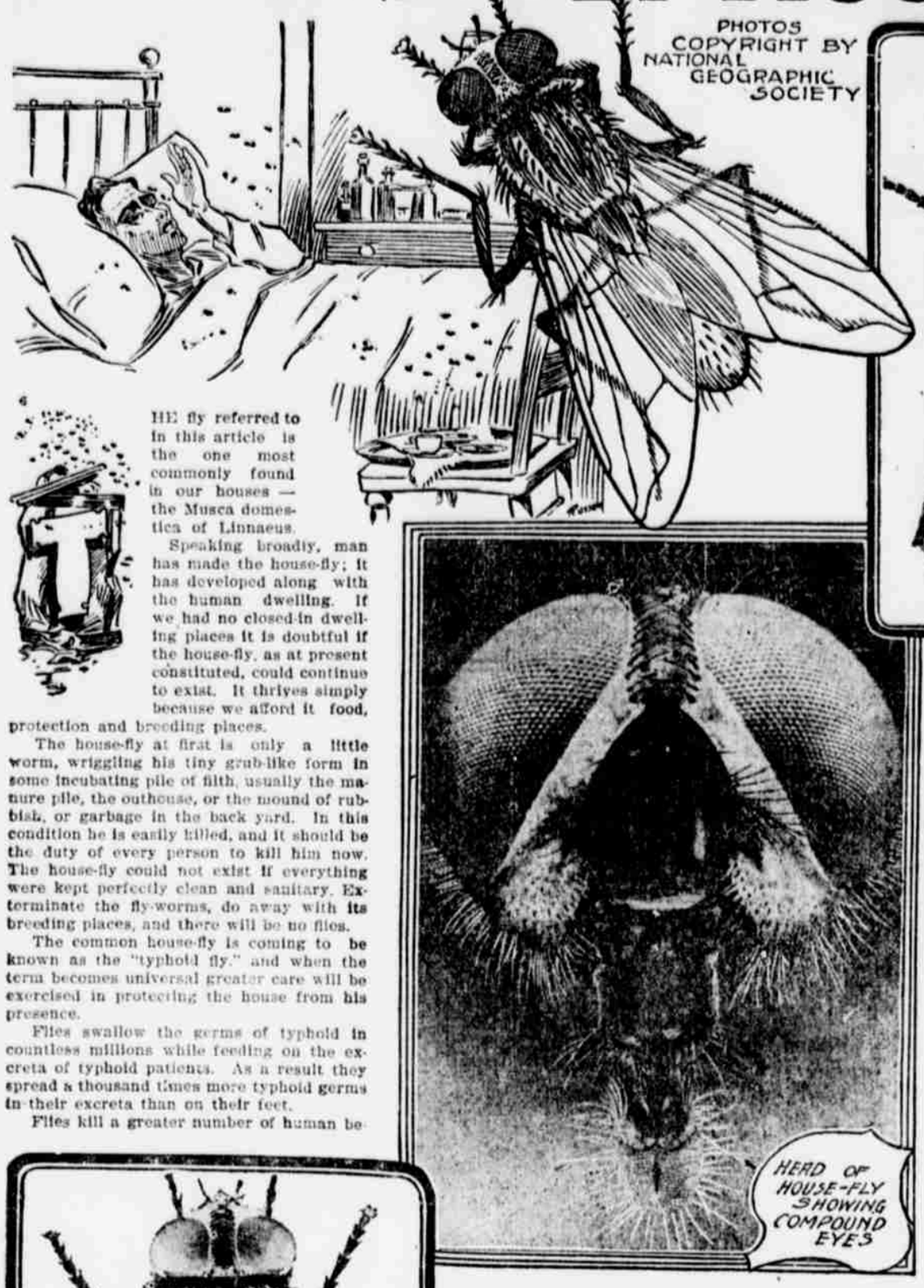
The DEADLY HOUSE-FLY



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MALE HOUSE-FLY SEEN FROM BELOW

THE fly referred to in this article is the one most commonly found in our houses — the Musca domestica of Linnaeus.

Speaking broadly, man has made the house-fly; it has developed along with the human dwelling. If we had no closed-in dwelling places it is doubtful if the house-fly, as at present constituted, could continue to exist. It thrives simply because we afford it food, protection and breeding places.

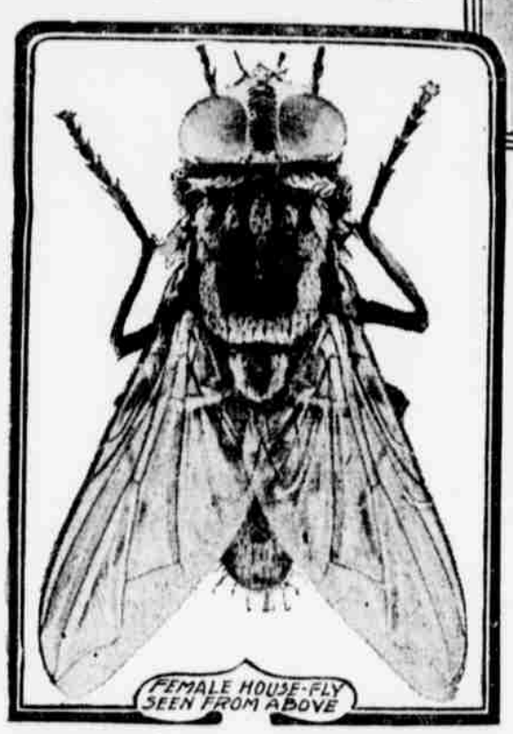
The house-fly at first is only a little worm, wriggling his tiny grub-like form in some incubating pile of filth, usually the manure pile, the outhouse, or the mound of rubbish, or garbage in the back yard. In this condition he is easily killed, and it should be the duty of every person to kill him now. The house-fly could not exist if everything were kept perfectly clean and sanitary. Exterminate the fly-worms, do away with its breeding places, and there will be no flies.

The common house-fly is coming to be known as the "typhoid fly," and when the term becomes universal greater care will be exercised in protecting the house from his presence.

Flies swallow the germs of typhoid in countless millions while feeding on the excreta of typhoid patients. As a result they spread a thousand times more typhoid germs in their excreta than on their feet.

Flies kill a greater number of human beings than all the beasts of prey, and poisonous serpents, for they spread disease which slays thousands.

HERD OF HOUSE-FLY SHOWING COMPOUND EYES



FEMALE HOUSE-FLY SEEN FROM ABOVE

As soon as the fly comes out of his shell he is full grown and starts out in the world to make a living and if your home is not clean he knows it, for the fly can discern an unclean odor for miles.

As much as they like odors of filth they dislike clean smells, and where the former will attract, the latter will repulse them. A pleasant-smelling substance—the fragrance of flowers, geraniums, mignonette, lavender, or any perfumery—will drive them away.

Most of our diseases are caused by invisible germs that lodge and grow in our bodies, destroying our tissues or poisoning us with their excreta. These germs may be brought to us from some sick person by whatever is large enough to carry them, and has the opportunity. Combine this fact with what every one knows about flies, and we see at once the tremendous importance of flies as carriers of human disease germs.

Look closely at the picture of the fly resting on the glass and viewed from below. Look at the feet and observe that each of them is equipped with two claws and two light-colored pads. The fly clings to rough surfaces by means of the claws and to smooth surfaces by a combined action of the claws and pads. The fly's pads are covered with thousands of minute short hairs, sticky at the end. There is no suction—merely adhesion.

All his grown-up life the fly has to manage with sticky feet. Imagine our plight if the soles of our feet were sticking plaster, perennially renewing its stickiness!

To such inconvenience the fly is constantly subject, and it is this that has bred into him the habit of frequently preening himself, particularly his feet. These are constantly becoming clogged with adhering substances, and this contamination the fly must assiduously remove if his feet are to act properly in supporting him on slippery places. If this contamination is too sticky to rub off the fly laps it off, and it then passes off in his excreta.

The fly lays her eggs in the manure pile or other objectionable filth. All the germs—all the imaginable microbes—fasten themselves on the spongy feet. He brings them into the house and wipes them off. The fly you see walking over the food you are about to eat is covered with filth and germs. If there is any dirt in your house or about your premises, or those of your neighbors, he has just come from it. Watch him as he stands on the sugar industriously wiping his feet. He is getting rid of disease germs, rubbing them on the sugar that you are going to eat, leaving the poison for you to swallow.

This does more to spread typhoid fever and cholera infantum and other intestinal diseases than any other cause.

Disease attacks human beings only when they are brought in contact with it. For instance, you cannot get typhoid fever unless you swallow the germs of typhoid, and you do not swallow these germs unless they get on the food you eat, or in the liquids you drink, or on the glasses or cups from which you drink.

Intestinal diseases are more frequent whenever and wherever flies are most abundant, and they, and not the summer heat, are the active agents of its spread.

There is special danger when flies drop into such fluid as milk. This forms an ideal culture material for the bacillus. A few germs washed from the body of one fly may develop into millions within a few hours, and the person who drinks such milk will receive large doses of bacilli, which may later cause serious sickness.

Here are some valuable fly "dont's" for the housewife:

Don't allow flies in your house.

Don't allow your fruits and confections to be exposed to the swarms of flies.

Don't let flies crawl over the baby's mouth and swarm upon the nipple of its nursing bottle.

Strike at the root of the evil. Dispose of waste materials in such a way that the house-fly cannot propagate, for flies breed in horse manure, decaying vegetables, dead animals, and all kinds of filth, so look after the garbage cans, see that they are cleaned, sprinkled with lime or kerosene oil, and closely covered.

Screen all windows and doors and insist that your grocer, butcher, baker and every one from whom you buy foodstuffs does the same, and remember that a large percentage of flies breed in the stable.

There is more health in a well-screened house than in many a doctor's visit.

After you have cleaned up your own premises, inspect the neighborhood for fly-breeding places. Call the attention of the owner to them and, if he does not remove them, complain to the board of health.

Keep flies away from the kitchen. Keep flies out of the dining room and away from the sick, especially from those ill with contagious diseases.

To clear rooms of flies, carbolic acid may be used as follows: Heat a shovel or any similar article and drop thereon 20 drops of carbolic acid. The vapor kills the flies.

A cheap and perfectly reliable fly poison, one which is not dangerous to human life, is bichromate of potash in solution. Dissolve one dram, which can be bought at any drug store, in two ounces of water, and add a little sugar. Put some of this solution in shallow dishes and distribute them about the house.

Sticky fly paper, traps and liquid poisons are among the things to use in killing flies, but the latest, cheapest, and best is a solution of formalin or formaldehyde in water. A spoonful of this liquid put into a quarter of a pint of water and exposed in the room will be enough to kill all the flies.

To quickly clear the room where there are many flies, burn pyrethrum powder in the room. This stupefies the flies, when they may be swept up and burned.

If there are flies in the dining room of your hotel, restaurant, or boarding house, complain to the proprietor that the premises are not clean.

The hookworm is undermining the vitality of a section, but the house fly threatens the health of the world.

Pest and plague and fever follow in its filthy footsteps. Its victims are legion.

The mosquito carries the germ of yellow fever. The sting of the tsetse fly infects with the numbing virus of the slow but certain sleeping sickness.

But the house fly carries on its sticky feet the potent poison of a dozen deaths.

The snake warns by hiss or rattle, and, in defense, strikes to kill, and then is to be shot or clubbed or ground beneath the boot heel. But the malicious, annoying fly, satellite of sickness, maker of cemeteries, deposits its slow poison and buzzes away, ever busy, never still, always on its errand of distributing the venom of embryo disease.

It wasn't so long ago that the house fly was neither known nor understood. Screens were considered a luxury, not a necessity; a matter of comfort, not a contribution to health.

But that is not the case now. The fly has been studied, its habits noted, its germ-laden body inspected through the microscope and photographed.

Bacteriologists, scientists, physicians know the house fly as it really is. They realize that incontrovertible proof has demonstrated that flies kill a greater number of human beings every year than all the beasts of prey and all the poisonous crawling things that live.

And it is the consensus of opinion that a campaign of education is essential to bring the general public to an appreciation of the truth.

These facts are known to every scientist. What is being done now is to carry these facts home to every householder, every person who eats in restaurants and lunchrooms and to every mother who watches her baby with an eye to warding off every possible danger. There is a great campaign being waged against the fly—"typhoid fly," as it is called, and Washington is the center of the campaign.

The war is being stirred up and urged by Richard B. Watrous, secretary of the American Civic association, which has covered the country with posters, circulars, booklets and even has taken up the moving picture film as a weapon against the pest and a method of popular instruction. The association pamphlets are simple and to the point. When one reads the four pages of fly literature, a deep disgust for the buzzing things is born, and another soldier in the anti-fly army has been drafted.

The accompanying photographs, magnified many thousand times, and more just as interesting, were made by Dr. N. A. Cobbs with a specially invented camera for the National Geographic society. Dr. Cobbs is making a special study of the nation's pest, as are other leading bacteriologists and scientists who have come to realize the importance of the work.

One of the odd things in connection with the campaign of education that is being conducted in many cities is the fact that the unpleasantness of the flies' habits has caused many a person to cease the description of the fly life and enter a sort of silent war. However, some cities and associations have issued enormous posters portraying the daily life of a fly. It is pretty bad. Several women have objected to seeing the posters, although it has been proven to them that the pictures are not overdrawn.

Moving picture films, showing the life and habits of the fly, have been shown in some of the large cities. These films were taken across the United States and shown in hundreds of cheap theaters and have been considered of great value in disseminating knowledge of just what the fly is and how much death and disease he can introduce into a house. In one of the cities protests were received from some rather delicately sensed ladies and the mayor ordered the films off the boards.

The chairman of that state board of health asked the reason and was told that protests were made. He then asked for the names of some of the protesting women.

He called on several, and learned that their feelings had been outraged by witnessing the daily life of a nasty fly, and they believed that the sight was too nauseating for the public.

Thereupon the state officer took the ladies out into their own back yards and kitchens and in more than one instance showed them where the fly was doing the same thing in real life that the moving films told of, and by that sort of work introduced some real war to Mr. Fly.

In every city bulletins are being issued showing how flies may be killed by the wholesale.

Two Seaside Views.

The Sentimental One—The beautiful beach was covered with shells this morning.

The Practical One—Yes; it's a shame to allow 'em to eat peanuts down there.—Yonkers Statesman.

WOMAN SELLS TIME

Strange and Profitable Occupation of an English Girl.

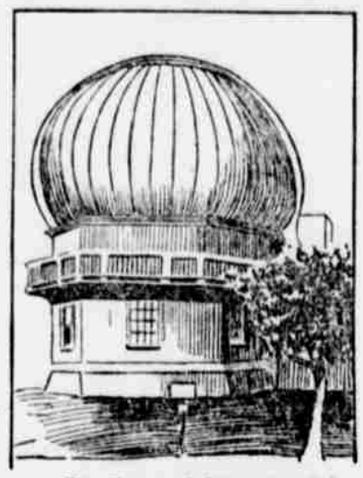
Gets $2,500 a Year From Clients Who Regulate Their Clocks by Time She Obtains at Earth's Latitudinal Center.

London.—When Halley's comet set all Europe gazing skyward, no society beauty was more eagerly courted by enterprising photographers than was the comet by the patient astronomers of Greenwich, whose photographic telescopes were kept searching the heavens, to note the arrival of the periodic visitor on the sensitive plate of the camera. Nor was the vigilance unrewarded. More than one distinct impression of the brilliant object is now on view at the Royal observatory, Greenwich.

This success has revived interest in this historic institution by the Thames, but few outside scientific circles know much of the history and details of the almost conventional group of buildings on

That fair hill where hoary sages boast
To name the stars and count the heavenly host.

Yet probably no hill in the world has had so strangely varied a history, or played so important a part in the affairs of men. The granite line across the footpath on its summit is the meridian from which the longitude on every British map and chart is calculated. All England sets its time by the mean-solar clock; and in addition to the daily and nightly observations of the heavens, elaborate records are kept of diurnal changes in the temperature and humidity, the direction and force of the wind, the amount of



The Tower of Greenwich.

sunshine and rainfall, the earth's magnetism and a host of meteorological matters forming a science of daily increasing importance and interest.

There is a large galvano-magnetic clock, fixed on the outside wall of the observatory, and divided into 24 hours. There are still many who believe this clock is kept going by the sun. They do not know that the fixed stars are the real timekeepers, from which Britishers check their daily progress. The Sidereal clock, kept within one of the buildings of the observatory, is corrected by observation of the stars

Woman Selling the Time.

every clear night, and every morning before ten o'clock the mean solar clock is checked from it. The latter is housed below the timeball on the tower which dominates the hill and is in magnetic connection with the clock in the boundary wall, which has furnished the correct time to countless visitors to the hill since it was placed there in 1852.

To this galvano-magnetic clock in the wall comes every Monday a woman who makes $2,500 a year out of the queerest occupation in England. She sells the time to London watchmakers.

Her name is Miss Belleville of Maidenhead. Eighty years ago the then astronomer royal suggested to her father that if he took the corrected time on a certified chronometer every week he could no doubt find numerous clients. So he bought a famous watch made for the duke of Essex, one of the sons of George III., and soon worked up a business with it. When he died his widow sold the time till she reached the age of eighty-one, and then she handed the business over to her daughter.

When Miss Belleville visits Greenwich at the beginning of every week her chronometer is corrected and she is given an official certificate. From that her 50 customers correct their watches and clocks.

CHURCH WAS BUILT IN 1679

Queer Old Quaker Meeting House in Buckinghamshire, England, of Interest to Americans.

London.—In the country of Buckinghamshire, England, is one spot of peculiar interest to Americans, by reason of its association with William Penn, the founder of Pennsylvania. This is the little meeting house of the Society of Friends at Jordans. Situated in a wooded hollow at the foot of a hill, it is the very expression of seclusion and of peace. The building is a simple red brick structure, with an interior of the plainest—plain wooden wainscoting and benches, and

Jordan's Meeting House.

whitewashed walls without adornment of any kind. On a small circular table, used formerly by William Penn, is the visitors' book, in which the names of Americans figure largely. The meeting house was built about 1679. At the present time two regular meetings are held in it every year, one on the fourth Sunday in May, the other on the first Thursday in June.

In the neighboring village of Chalfont St. Giles, situated some two miles to the northeast of Jordans, is the cottage where Milton lived and where he wrote "Paradise Lost," while two miles further on, still in the same direction, commanding the villa residences of Chorley Wood, is the fine old half-timbered house of King's Farm, where William Penn was married, in 1672, to Gulielma, daughter of Sir William Springett.

CHECKS FRISCO RAT PLAGUE

Federal Health Authorities Describe Extensive Campaign Against Disease-Spreading Rodents.

Washington.—While no case of human plague has appeared in San Francisco in two years and four months and no case of rat plague has been found there in a year and six months, the deadly war for the extermination of rats in the Pacific coast metropolis continues without relaxation.

With this statement Acting Assistant Surgeon G. M. Converse of the United States Public Health and Marine hospital service introduces a report containing interesting details of the anti-plague work. This war on rats is mostly in the nature of a prophylactic measure against reinfection.

Thirty laborers are employed exclusively as rat trappers. There are in constant use about 8,000 traps of the cage and snap varieties. During May 8,561 rats were trapped. In this time the bait used was 321 pounds of bacon, 104 pounds of cheese and 620 loaves of bread. Bread was the best bait in cage traps; a record is kept of the location each rat is trapped.

Destruction of rats by poison is now limited to the sewers. During May 27,452 pieces of poisoned bread were distributed on boards placed in the sewers.

City inspectors, acting under the United States authorities, have been making a reinspection of all premises in the city and Surgeon Converse says the result at the present time seems to show that the people have learned a lesson of cleanliness.

THIEVES INVENT A NEW WAY

Clever Philadelphia Shoplifters Perfect an Ingenious Device for Carrying on Their Work.

Philadelphia.—Some time ago in several large stores in this city it was found that goods were being stolen in a wholesale way that set all the floor watchers working with redoubled energy, but despite their extra vigilance the thieves were not detected for quite awhile. Finally their system was discovered and through the arrest recently of two men and a young woman from $3,000 to $4,000 worth of stolen goods were recovered in their room. The detectives entered the room just as the three were unloading goods of various kinds from the big paper boxes in which the purloined articles had been successfully secreted while the thieves were at work in the stores.

The boxes were especially designed for making thefts easy, the arrangement being something new even in the varied arts of shoplifters. A hole about twelve inches long and five inches wide was cut in each box, and the box was so carried under the arm with this hole next to the side of the body that it was almost impossible to discover it. The accused would each buy some trifling articles and pay for it. The bill was then taken and attached to the box in such a way that it could be seen readily by the salespeople and store detectives. Each of the thieves would operate at different counters, as a rule, but sometimes one of the men and the woman would operate together.